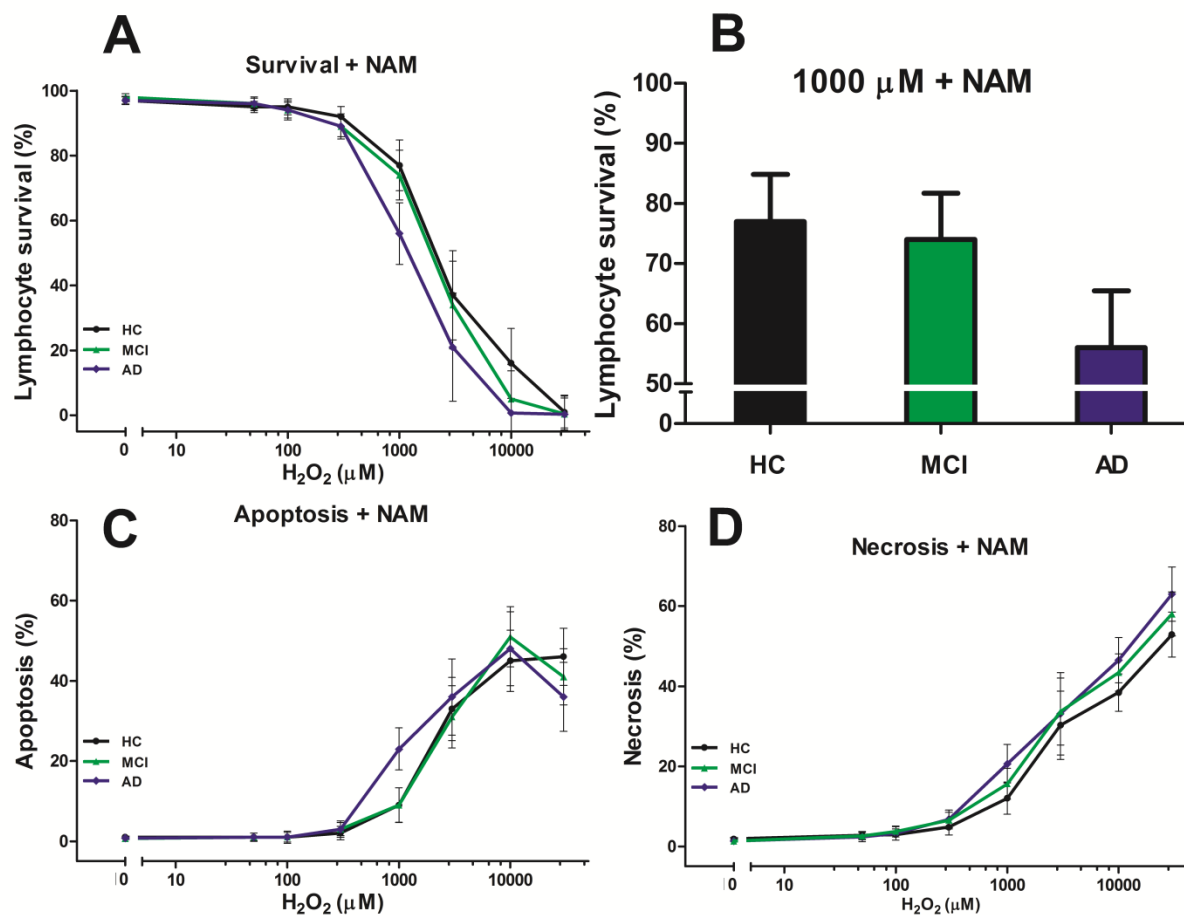
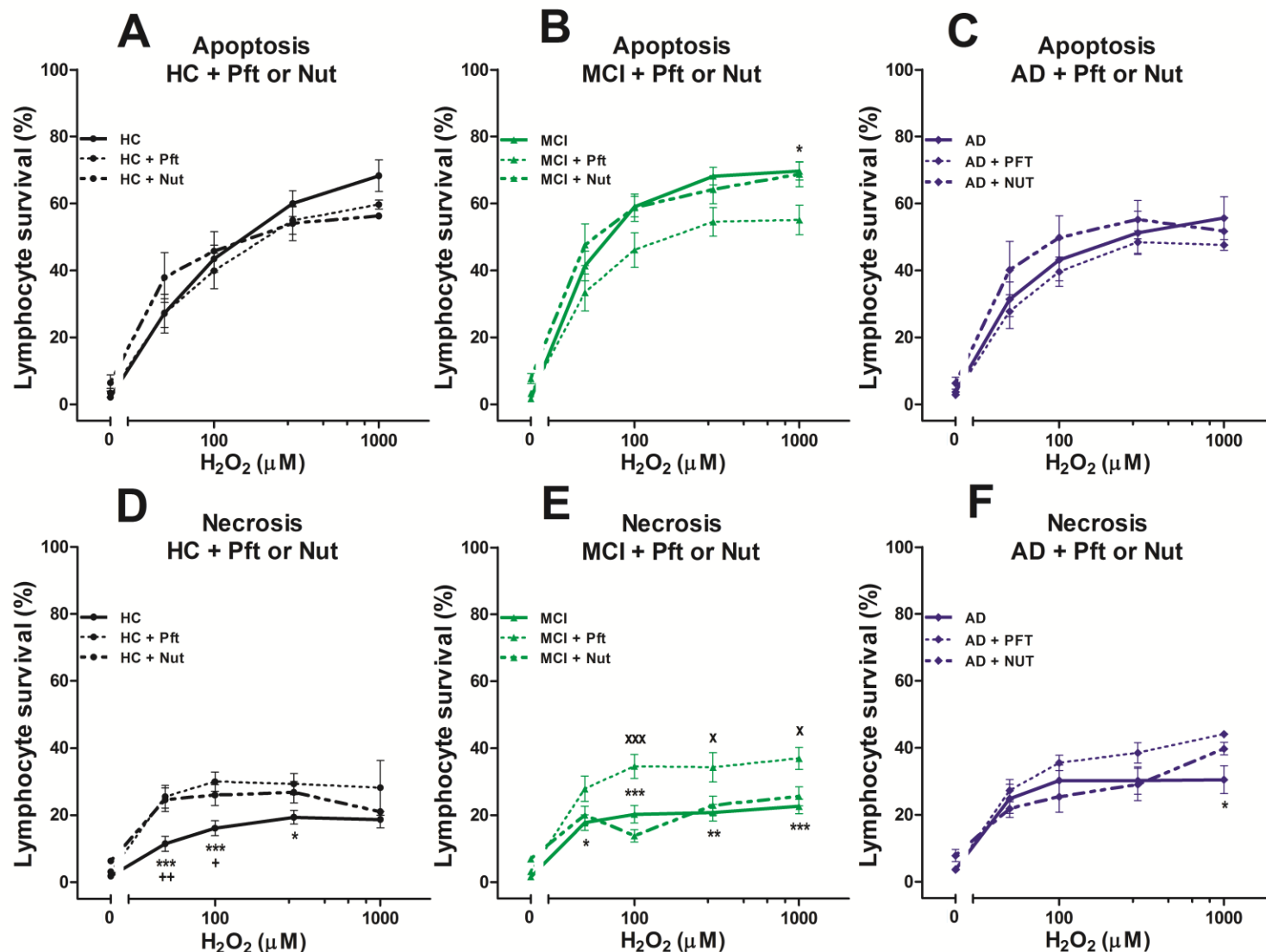


Supplementary Figure 1. Effect of PARP inhibition with 3-ABA on survival, apoptosis and necrosis of the H₂O₂-induced death of lymphocytes from HC, MCI and AD patients. Survival (upper panels), apoptosis (middle panels) and necrosis (lower panels) curves of the H₂O₂-induced death of lymphocytes from 15 healthy controls (HC; black symbols), 16 Mild Cognitive Impairment patients (MCI; green symbols), and 10 Alzheimer's disease patients (AD; blue symbols) were exposed to H₂O₂ for 20 hours in the absence (continuous line) or presence of 5 mM 3-ABA (interrupted lines), applied 30 min before H₂O₂ incubation (% , means \pm SE).



Supplementary Figure 2. Effect PARP-1 inhibition with Nicotinamide (NAM) on H_2O_2 -induced death of lymphocytes. Lymphocytes from 8 Mild Cognitive Impairment patients (MCI; green symbols), 6 Alzheimer's disease patients (AD; blue symbols), and 5 healthy controls (HC; black symbols) were pre-incubated with 5 mM NAM for 30 minutes and then exposed to H_2O_2 for 20 hours. (A) Survival curves (means \pm SE), (B) Survival at 1000 μM H_2O_2 (%), (C) and (D) apoptosis and necrosis curves from experiments in A, respectively (%), means \pm SE).



Supplementary Figure 3. Effect of p53 modulation on H₂O₂-induced apoptosis and necrosis of lymphocytes. Apoptosis (upper panels) and necrosis (lower panels) curves from the experiments in Fig 4 of the main document. Lymphocytes from 6 healthy controls (HC) (A), 8 Mild Cognitive Impairment patients (MCI) (B), and 5 Alzheimer's disease patients (AD) (C) were exposed to H₂O₂ for 20 hours in the absence (continuous line) or presence of the p53 inhibitor, Pifithrin- α (Pft) 20 μ M (short interrupted lines), or the p53 stabilizer, Nutlin 3a (Nut) 10 μ M (long interrupted lines) applied 30 min before H₂O₂ incubation (means \pm SE). (D) Lymphocyte survival values measured at 50 μ M H₂O₂ with Pft or Nut. (means \pm SE). Symbols: * = H₂O₂ vs H₂O₂ + Pft; + = H₂O₂ vs H₂O₂ + Nut; X = H₂O₂ + Pft vs H₂O₂ + Nut. 1 symbol: p<0.05; 2 symbols: p<0.005; 3 symbols: p<0.0001 for all figures.